

fins. *Saccodon dariensis* (Meek and Hildebrand)⁶

⁶ *Parodon dariensis* Meek and Hildebrand, Field Mus. Nat. Hist. Publ. Zool. 10: 84. 1913 (Río Cupe, Cituro, Panamá [Tuyra Basin]).

Apareiodon dariensis Meek and Hildebrand, Field Mus. Nat. Hist. Publ. Zool. 10: 271, pl. 17. 1916.—Eigenmann, Ann. Carnegie Mus. 10: 76. 1916 (western slopes of southern Panamá).—Eigenmann, Mem. Carnegie Mus. 9 (1): 111. 1922 (Tuyra Basin).—Breder, Bull. Amer. Mus. Nat. Hist. 57: 114, fig. 5a. 1927 (Río Tuguesa, Panamá).—Hildebrand, Publ. Field Mus. Nat. Hist., zool. ser., 22 (4): 248. 1938 (Río Cupe; Río Chucunnaque; Río Chiatí).

Apareiodon compressus Breder, Amer. Mus. Nov., no. 180: 4, figs. 3, 4. 1925 (Río Tuguesa,

Darién, Panamá).—Breder, Bull. Amer. Mus. Nat. Hist. 57: 115, figs. 5b, 6. 1927 (Río Tuguesa).—Hildebrand, Publ. Field Mus. Nat. Hist., zool. ser., 22 (4): 248. 1938 (Chucunnaque Basin).

The senior author has examined the type of *A. compressus*, A.M.N.H. 8408. The left pectoral fin has ii, 12 rays, the right one being broken off near its base; the dorsal is broken, but study shows ii, 10 rays; both pelvics are in good condition, with i, 8 rays each; anal ii, 7. The mouth also is injured. The free upper lip character is clear, but the positions of the teeth are not in a straight line as in *Parodon*. The lower lip is rounded, and the 5-lobed edge found in adults is not developed. I conclude that *A. compressus* is a synonym of *Saccodon dariensis* (Meek and Hildebrand).

ZOOLOGY.—*A new species of Cyclocoelum, a trematode from the catbird.*¹ C. COURSON ZELIFF, Pennsylvania State College. (Communicated by A. WETMORE.)

Four specimens of flukes belonging to the genus *Cyclocoelum* Brandes were collected from a dead catbird found in Adams County, Pa., during 1939 by Assistant Professor Merrill Wood, an ornithologist of the Zoology Department of Pennsylvania State College. They were presented to the author for identification and study. Three of them were in good condition and were stained with Delafield's hemotoxylin, a slight pressure being applied to the specimens between slides. No previous record has been found of a member of the genus *Cyclocoelum* in catbirds, and a study of the worms indicates sufficient anatomical differences to justify regarding them as representing a new species.

Cyclocoelum dumetellae, n. sp.

Specific diagnosis.—Body oblong, sides nearly parallel in middle, body slightly curved to right, narrowed slightly anteriorly and slightly rounded posteriorly, 8.5 mm long by 1.5 mm wide. Cuticle rough and scaly but not spiny. Oral sucker 0.27 mm in diameter, subterminal and rather faintly outlined. Acetabulum lacking. Pharynx 0.22 to 0.27 mm wide by 0.27 to 0.30 mm long. Prepharynx present. Esophagus 0.5 mm wide, short and somewhat sinuous. Intestinal caeca continuous in the posterior portion, typical for the genus. Excretory vesicle between the posterior arc and body wall, with lateral excretory canals. Testes nearly spheri-

cal, 0.52 mm in diameter, the posterior one occasionally slightly flattened anteroposteriorly. Anterior portion of vas deferens observed; vasa efferentia not seen. Cirrus sac 0.07 mm wide by 0.26 mm long, on right side reaching anterior intestinal arc but rarely farther posteriorad. Genital pore at the level of posterior portion of the pharynx. Ovary 0.26 to 0.30 mm in diameter, between the testes, but to right of and out of line with them. Seminal receptacle unobserved. Mehlis's gland oblong, approximately the size of ovary. Vitellaria extending from slightly posterior of anterior intestinal arc or fork to the posterior border of the posterior intestinal arc, mostly between the caeca and the margins with slight overlapping of the former in some areas; dorsal to caeca. Transverse vitelline ducts between ovary and posterior testis. Ootype and oviduct not observed. Laurer's canal apparently absent. Ova 60 μ by 120 μ .

Host.—*Dumetella carolinensis* (Linnaeus).

Location.—Air sac.

Locality.—Adams County, Pa.

Type specimen.—U.S.N.M. Helm. Coll. no. 36837; paratype, no. 36838.

Remarks.—Khan (1935) gives four groupings of species of the genus based on the relation of the ovary and testes and the intercaecal location of the uterus. One of the three specimens has the posterior testis somewhat oblong. Only one has slight overlapping of the caeca by the uterus. Other slight distortions or deviations might be mentioned that would exclude a speci-

¹ Received April 29, 1943.

men from a system such as that given by Khan. He lists 19 species, six being those described by himself, one of which, *C. nebularium*, has now been allocated to *Hoematotrephus* by Lal (1939). Bhalerao (1935) lists 11 species, one of which is new and seven of which are not listed by the former. Lal (1939) describes no new species, but he suggests that *Receptacoelum* be created for those species with a receptaculum seminis. He considers *Prohyptiasmus* Witenberg to be a synonym of *Cyclocoelum*. Yamaguti (1939) described *C. turusigi* from *Tringa erythropus*, which makes at least six species in sandpipers.

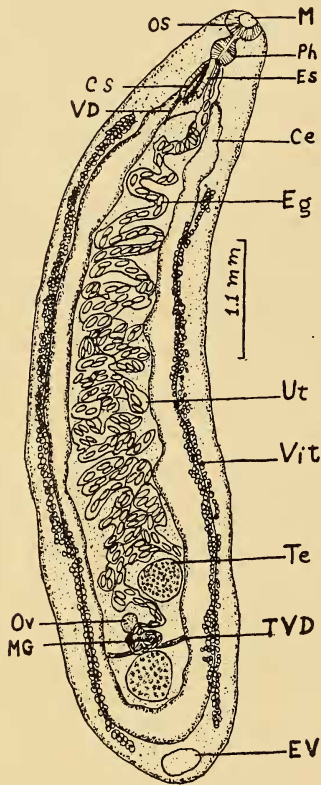


Fig. 1.—*Cyclocoelum dumetellae*, n. sp.: Ventral view. (CS, Cirrus sac; Ce, caecum; Es, esophagus; Eg, egg; EV, excretory vesicle; M, mouth; MG, Mehlis's gland; OS, oral sucker; Ov, ovary; Ph, pharynx; Te, testis; TVD, transverse vitelline duct; Ut, uterus; VD, vas deferens; Vit, vitellaria.)

Observation of the drawings of the species described by Khan (1935) indicates that the curved conditions of his specimens are characteristic of several species. This may be due to contact with the tissues of the host or to a typical habit of muscular contraction. After comparing the characteristics of the specimens with

those of about 30 other species, particularly North American species, considerable variation is noted. The closest similarity is with *C. microcotyleum* (Noble, 1933) and *C. obscurum* (Leidy, 1887). Harrah (1922) gives a more complete description of the latter.

C. dumetellae differs from the latter species in a less forward extension of the vitellaria, sinuous esophagus of uniform size, equal testes, and (if constant) in having the anterior testis near the left caecum; also from the former species by the uniform size, the lesser width, presence of an oral sucker, the diagonal relation of the testes, and the position of the ovary on the right side. The comparison with *C. obscurum* is therefore closer than with *C. microcotyleum*. Harrah (1922) has shown that the position of some organs in the body may be inverted in the same species. This condition or a misinterpretation of the surfaces may account for difficulties observed in drawings and descriptions. The species herein described differs from *C. ovopunctatum* Stossich, which is closely related to *C. obscurum*, by the difference in the testis-ovary ratio. It is not clear to the author from the more complete description of Harrah (1922) whether *C. obscurum* (Leidy, 1887) actually occurs in the jewfish and also in birds since most species of the genus have birds as hosts. The former reports it from the western willet (*Catoptrophorus semipalmata inornata*, formerly *Symphemia semipalmata inornata*). It seems likely that some error in labeling may account for the record for the jewfish. An authority whom the author consulted agrees with this view:

LITERATURE CITED

- BHALERAO, G. D. *On two new monostomes (Trematoda) from avian hosts in British India*. Indian Journ. Vet. Sci. and Animal Husb. 5: 49-63. 1935.
- HARRAH, E. C. *North American monostomes*. Illinois Biol. Monogr. 7(3): 1-106. 1922.
- KHAN, M. H. *On eight new species of the genus Cyclocoelum Brandes from North American snipes*. Proc. Acad. Sci. United Provinces India 4 (pt. 4): 342-370. 1935.
- LAL, M. B. *Studies in helminthology: Trematode parasites of birds*. Proc. Indian Acad. Sci. 10, sect. B (2): 111-200. 1939.
- LEIDY, JOSEPH. *Notice of some parasitic worms*. Proc. Acad. Nat. Sci. Philadelphia, 1887: 20-24. 1887.
- NOBLE, A. E. *Two new trematodes from the American coot*. Trans. Amer. Micr. Soc. 52 (4): 353-360. 1933.
- YAMAGUTI, S. *Studies on the helminth fauna of Japan, pt. 25. Trematodes of birds, IV*. Jap. Journ. Zool. 8: 132. 1939.